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Independent Pneumatic Tool Co., Portable right-angle drill Inspection Bureau of locomotive, report	151* 54* 301§	C. M. St. P. & P.  N. Y. C.  Recent, Examples of  4-8-4  C. M. St. P. & P.  M. St. P. & S. S. M	444* 165* 337 463* 123* 457 245*	New York Railroad Club (see Clubs and Assns.) Northern Pacific Angle-cock cap remover Boiler failure Cleaning machine, Air-reservoir Lylinder-welding car Jig for laying tight car floors	313* 453§
Independent Pneumatic Tool Co., Portable right-angle drill Inspection Bureau of locomotive, report	54* 301§ 311* 344*	C. M. St. P. & P	444* 165* 337 463* 123* 457 245*	New York Railroad Club (see Clubs and Assns.) Northern Pacific Angle-cock cap remover Boiler failure Cleaning machine, Air-reservoir Cylinder-welding car	313* 453§ 385* 493*
Independent Pneumatic Tool Co., Portable right-angle drill Inspection Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§	C. M. St. P. & P.  N. Y. C.  Recent, Examples of  4-8-4  A. C. L	444* 165* 337 463* 123* 457 245* 120 323*	New York Railroad Club (see Clubs and Assns.) Northern Pacific Angle-cock cap remover. Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors. Nystrom, K. F., honored by St. Louis Car	313* 4538 385* 493* 71*
Independent Pneumatic Tool Co., Portable right-angle drill Inspection Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331*	C. M. St. P. & P.  N. Y. C.  Recent, Examples of	444* 165* 337 463* 123* 457 245* 120	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover. Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors. Nystrom, K. F., honored by St. Louis Car Men  O O'Brien, R. A., Cracking of boiler steel	313* 453\$ 385* 493* 71* 496
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§	C. M. St. P. & P. N. Y. C. Recent, Examples of	444* 165* 337 463* 123* 457 245* 120 323* 161† 88*	New York Railroad Club (see Clubs and Assns.) Northern Pacific Angle-cock cap remover. Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors. Nystrom, K. F., honored by St. Louis Car Men  O O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course	313* 453§ 385* 493* 71* 496
Independent Pneumatic Tool Co., Portable right-angle drill Inspection Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331*	C. M. St. P. & P.  N. Y. C.  Recent, Examples of	444* 165* 337 463* 123* 457 245* 120 323* 161† 88*	New York Railroad Club (see Clubs and Assns.) Northern Pacific Angle-cock cap remover. Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors. Nystrom, K. F., honored by St. Louis Car Men  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co	313* 4538 385* 493* 71* 496
Independent Pneumatic Tool Co., Portable right-angle drill Inspection Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331*	C. M. St. P. & P. N. Y. C. Recent, Examples of	444* 165* 337 463* 123* 457 245* 120 323* 161† 88* 399† 208*	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover. Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors.  Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.)	313* 453§ 385* 493* 71* 496 331* 276§ 454§ 158*
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	151* 54* 3018 311* 344* 1418 331* 282	C. M. St. P. & P. N. Y. C. Recent, Examples of	444* 165* 337 463* 123* 457 120 323* 161† 88* 399† 208* 223	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover. Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors. Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.). Oil lubrication (see Lubrication)	313* 4538 385* 493* 71* 496 331* 2768 4548 158* 267 435
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331* 282  483*	C. M. St. P. & P. N. Y. C. Recent, Examples of	444* 165* 337 463* 123* 457 457 120 323* 161† 88* 399† 223 473 118†	New York Railroad Club (see Clubs and Assns.) Northern Pacific Angle-cock cap remover. Boiler failure Cleaning machine, Air-reservoir Cylinder-welding car Jig for laying tight car floors Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel Oddities in railroad operation Ohio State University welding course Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.) Oil lubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses Operation, Locomotive, Smokeless	313* 453§ 385* 493* 71* 496 331* 276§ 454§ 158*
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331* 282  483* 500 357† 316†	C. M. St. P. & P.  N. Y. C.  Recent, Examples of.  4-8-4  A. C. L.  C. M. St. P. & P.  M. St. P. & S.  M. St. P. & S.  M. St. S. M.  Journal Pacific (streamline)  Union Pac.  Union Pac.  4-6-6-4, D. & R. G. W.  Diesel-electric  900-hp., C. R. I. & P. leases.  900-hp., Youngstown & Northern.  1,800-hp. S. A. L. Orange Blossom  Special  Modern  United States and Canada (Table)  Foreign:  Evolution of the locomotive (André Chapelon)  Turbo-electric 2,500-hp., Union Pac.  London, Midland & Scottish, Coronation Scot to tour America  Loss and damage and the car man, by Joe	444* 165* 337 463* 123* 457 120 323* 161† 88* 223 473 118† 319†	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover. Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors.  Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.) Oil lubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses.	313* 453\$ 385* 493* 71* 496 331* 276\$ 454\$ 158* 267 435
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331* 282  483* 500 357† 316† 79	C. M. St. P. & P.  N. Y. C.  Recent, Examples of.  4-8-4  A. C. L.  C. M. St. P. & P.  M. St. P. & S. S. M.  Southern Pacific (streamline)  Union Pac.  4-6-6-4, D. & R. G. W.  Diesel-electric  900-hp., C. R. I. & P. leases.  900-hp., Youngstown & Northern.  1,800-hp. S. A. L. Orange Blossom  Special  Modern  United States and Canada (Table)  Foreign:  Evolution of the locomotive (André Chapelon)  Turbo-electric 2,500-hp., Union Pac.  London, Midland & Scottish, Coronation Scot  to tour America  Loss and damage and the car man, by Joe  Marshall  Louisville & Nashville, Thomas multiple	444* 165* 337 463* 123* 457 120 323* 161† 88* 223 473 118† 319† 353	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover. Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors.  Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.) Oil Iubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses. Operation, Locomotive, Smokeless Oxweld Railroad Service Co., portable cut-	313* 4538 385* 493* 71* 496 331* 2768 4548 158* 267 435
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	54* 301§ 311* 344* 141§ 331* 282 483* 500 357† 316† 79 357† 160†	C. M. St. P. & P.  N. Y. C.  Recent, Examples of.  4-8-4  A. C. L.  C. M. St. P. & P.  M. St. P. & S. S. M 361*, Southern Pacific (streamline) Union Pac 43*, 4-6-6-4, D. & R. G. W.  Diesel-electric 900-hp., C. R. I. & P. leases 900-hp., Youngstown & Northern 1,800-hp. S. A. L. Orange Blossom Special Modern United States and Canada (Table) Foreign: Evolution of the locomotive (André Chapelon) Turbo-electric 2,500-hp., Union Pac London, Midland & Scottish, Coronation Scot to tour America Loss and damage and the car man, by Joe Marshall Louisville & Nashville, Thomas multiple punch at So. Louisville.	444* 165* 337 463* 123* 457 120 323* 161† 88* 399† 208* 223 473 118† 319† 353 237*	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover. Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors.  Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.). Oil lubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses. Operation, Locomotive, Smokeless Oxweld Railroad Service Co., portable cutting machine  P  Pacific Ry, Club (see Clubs and Assns.)	313* 4538 385* 493* 71* 496 331* 2768 4548 158* 267 435
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	54* 301§ 311* 344* 141§ 331* 282 483* 500 357† 316† 79 357† 160†	C. M. St. P. & P.  N. Y. C.  Recent, Examples of.  4-8-4  A. C. L.  C. M. St. P. & P.  M. St. P. & S. S. M 361*, Southern Pacific (streamline) Union Pac 43*, 4-6-6-4, D. & R. G. W.  Diesel-electric 900-hp., C. R. I. & P. leases 900-hp., Youngstown & Northern 1,800-hp. S. A. L. Orange Blossom Special Modern United States and Canada (Table) Foreign: Evolution of the locomotive (André Chapelon) Turbo-electric 2,500-hp., Union Pac London, Midland & Scottish, Coronation Scot to tour America Loss and damage and the car man, by Joe Marshall Louisville & Nashville, Thomas multiple punch at So. Louisville.	444* 165* 337 463* 123* 457 120 323* 161† 88* 399† 208* 223 473 118† 319† 353 237*	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover. Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors.  Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.) Oil lubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses. Operation, Locomotive, Smokeless. Oxweld Railroad Service Co., portable cutting machine  P  Pacific Ry, Club (see Clubs and Assns.) Painting equipment	313* 4538 385* 493* 71* 496 331* 2768 4548 158* 267 435
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	54* 301§ 311* 344* 141§ 331* 282 483* 500 357† 316† 79 357† 160†	C. M. St. P. & P.  N. Y. C.  Recent, Examples of.  4-8-4  A. C. L.  C. M. St. P. & P.  M. St. P. & S. S. M.  Southern Pacific (streamline)  Union Pac.  4-6-6-4, D. & R. G. W.  Diesel-electric  900-hp., C. R. I. & P. leases.  900-hp., Youngstown & Northern.  1,800-hp. S. A. L. Orange Blossom  Special  Modern  United States and Canada (Table)  Foreign:  Evolution of the locomotive (André  Chapelon)  Turbo-electric 2,500-hp., Union Pac.  London, Midland & Scottish, Coronation Scot  to tour America  Loss and damage and the car man, by Joe  Marshall  Louisville & Nashville, Thomas multiple  punch at So. Louisville.  Tubrication  Oil, Force-feed (L. V.)  Railroad equipment, by L. Grisbaum.  Report (Car Dept. Officers Assn.)	444* 165* 337 463* 123* 457 120 323* 161† 88* 399† 208* 223 473 118† 319† 353 237*	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover. Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Tyling for laying tight car floors.  Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.). Oil lubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses. Operation, Locomotive, Smokeless. Oxweld Railroad Service Co., portable cutting machine  P  Pacific Ry. Club (see Clubs and Assns.) Painting equipment Sand blast gun, Flat-nozzle, Michiana Products Corp.	313* 4538 385* 493* 71* 496 331* 2768 4548 158* 267 435
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	54* 301§ 311* 344* 141§ 331* 282 483* 500 357† 316† 79 357† 160†	C. M. St. P. & P.  N. Y. C.  Recent, Examples of	444* 165* 337 463* 123* 457 120 323* 161† 88* 399† 208* 223  473 118† 319† 353 237* 12* 27 419	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover. Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors.  Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.) Oil lubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses. Operation, Locomotive, Smokeless. Oxweld Railroad Service Co., portable cutting machine  P  Pacific Ry, Club (see Clubs and Assns.) Painting equipment Sand blast gun, Flat-nozzle, Michiana Products Corp. Recent trends in (Car Dept. Officers' Assn.)	313* 453§ 385* 493* 71* 496  331* 276§ 454§ 158* 141§ 225‡ 190*
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331* 282  483*  500 357† 316† 79 357† 160† 399†	C. M. St. P. & P.  N. Y. C.  Recent, Examples of.  4-8-4  A. C. L.  C. M. St. P. & P.  M. St. P. & S. S. M361*, Southern Pacific (streamline) Union Pac	444* 165* 337 463* 123* 457 120 323* 161† 88* 399† 208* 223  473 118† 319† 353 237* 12* 27 419	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover. Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors.  Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel Oddities in railroad operation. Ohio State University welding course Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.). Oil lubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses Oxweld Railroad Service Co., portable cutting machine  P  Pacific Ry. Club (see Clubs and Assns.) Painting equipment Sand blast gun, Flat-nozzle, Michiana Products Corp. Recent trends in (Car Dept. Officers' Assn.)  Payroll distribution, The	313* 453§ 385* 493* 71* 496  331* 276§ 454§ 454§ 454§ 118* 225‡ 190*
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331* 282  483*  500 357† 316† 79 357† 160† 399†	C. M. St. P. & P.  N. Y. C.  Recent, Examples of	444* 165* 337 463* 123* 457 120 323* 161† 88* 399† 208* 223  473 118† 319† 353 237* 12* 27 419	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover. Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors.  Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.). Oil lubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses. Operation, Locomotive, Smokeless. Oxweld Railroad Service Co., portable cutting machine  P  Pacific Ry. Club (see Clubs and Assns.) Painting equipment Sand blast gun, Flat-nozzle, Michiana Products Corp. Recent trends in (Car Dept. Officers' Assn.) Payroll distribution, The. Pennsylvania A. A. R. high-speed passenger locomotive	313* 453§ 385* 493* 71* 496  331* 276§ 454§ 158*  267 435  141§ 225\$ 190*
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331* 282  483*  500 357† 316† 79 357† 160† 399†	C. M. St. P. & P.  N. Y. C.  Recent, Examples of.  4-8-4  A. C. L.  C. M. St. P. & P.  M. St. P. & S. S. M.  Southern Pacific (streamline)  Union Pac.  4-6-6-4, D. & R. G. W.  Diesel-electric  900-hp., C. R. I. & P. leases.  900-hp., Youngstown & Northern.  1,800-hp. S. A. L. Orange Blossom  Special  Modern  United States and Canada (Table)  Foreign:  Evolution of the locomotive (André  Chapelon)  Turbo-electric 2,500-hp., Union Pac.  London, Midland & Scottish, Coronation Scot  to tour America  Loss and damage and the car man, by Joe  Marshall  Louisville & Nashville, Thomas multiple  punch at So. Louisville.  Lubrication  Oil, Force-feed (L. V.)  Railroad equipment, by L. Grisbaum.  Report (Car Dept. Officers Assn.)  Lubricators: Oil dividers for use on loco-  motives (L. V.)  "Lumber Night" N. Y. Railroad Club.  M  Machine tool	444* 165* 337 463* 123* 457 120 323* 161† 88* 399† 208* 223 473 118† 353 237* 12* 497	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover. Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors.  Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.). Oil lubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses. Operation, Locomotive, Smokeless. Oxweld Railroad Service Co., portable cutting machine  P  Pacific Ry, Club (see Clubs and Assns.) Painting equipment Sand blast gun, Flat-nozzle, Michiana Products Corp. Recent trends in (Car Dept. Officers' Assn.) Payroll distribution, The. Pennsylvania A. A. R. high-speed passenger locomotive tests "Blue Ribbon" fleet	313* 453\\ 453\\ 385* 496*  71*  496  331* 276\\ 454\\ 457 372*
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331* 282  483* 500 357† 316† 79 357† 160† 399†  217 417 350*	C. M. St. P. & P. N. Y. C. Recent, Examples of.  4-8-4 A. C. L. C. M. St. P. & P. M. St. P. & S. S. M	444* 165* 337 463* 123* 457 245* 120 323* 161† 88* 399† 208* 223 473 118† 353 237* 12* 497	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover.  Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors.  Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.) Oil lubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses. Operation, Locomotive, Smokeless. Oxweld Railroad Service Co., portable cutting machine  P  Pacific Ry. Club (see Clubs and Assns.) Painting equipment Sand blast gun, Flat-nozzle, Michiana Products Corp. Recent trends in (Car Dept. Officers' Assn.) Payroll distribution, The Pennsylvania A. A. R. high-speed passenger locomotive tests "Blue Ribbon" fleet Boiler failure Equipment purchases	313* 453§ 385* 471* 496  331* 276§ 454§ 454§ 158* 267 435 141§ 225‡ 190*  29* 417 142§ 457
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331* 282  483* 500 357† 316† 79 357† 160† 399†  217 417 350*	C. M. St. P. & P. N. Y. C. Recent, Examples of.  4-8-4 A. C. L. C. M. St. P. & P. M. St. P. & S. S. M361*, Southern Pacific (streamline) Union Pac	444* 165* 337 463* 123* 457 245* 1208* 223 473 118† 353 237* 12* 27 419 12* 497	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover.  Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors.  Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course Oil ourners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.) Oil lubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses Operation, Locomotive, Smokeless Oxweld Railroad Service Co., portable cutting machine  P  Pacific Ry. Club (see Clubs and Assns.) Painting equipment Sand blast gun, Flat-nozzle, Michiana Products Corp. Recent trends in (Car Dept. Officers' Assn.) Payroll distribution, The Pennsylvania A. A. R. high-speed passenger locomotive tests "Blue Ribbon" fleet Boiler failure Equipment purchases Pere Marquette, Flexible staybolt, application, by A. D. O'Neill (M. B. A.)	313* 453§ 385* 471* 496  331* 276§ 454§ 158* 267 435 141§ 225‡ 190*  29* 417 142§ 457 372* 453§
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331* 282  483* 500 357† 316† 79 357† 160† 399†  217 417 350*	C. M. St. P. & P.  N. Y. C.  Recent, Examples of.  4.8-4  A. C. L.  C. M. St. P. & P.  M. St. P. & S.  M. St. P. & P.  M. St.	444* 165* 337 463* 123* 457 245* 120 323* 161† 88* 399† 208* 223 473 118† 353 237* 12* 497	New York Railroad Club (see Clubs and Assns.) Northern Pacific Angle-cock cap remover. Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors. Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.) Oil-firing practice (F. & T. E. A.) Oil-fubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses Operation, Locomotive, Smokeless Oxweld Railroad Service Co., portable cutting machine  P Pacific Ry. Club (see Clubs and Assns.) Painting equipment Sand blast gun, Flat-nozzle, Michiana Products Corp. Recent trends in (Car Dept. Officers' Assn.) Payroll distribution, The. Pennsylvania A. A. R. high-speed passenger locomotive tests "Blue Ribbon" fleet Boiler failure Equipment purchases Pere Marquette, Flexible staybolt, application, by A. D. O'Neil (M. B. A.). Performance, Locomotive, Not properly supervised	313* 4538 385* 493* 71* 496  331* 2768 158* 267 435 1418 225\$ 190*  29* 417 1428 457 372* 4538 283†
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331* 282  483* 500 357† 316† 79 357† 160† 399†  217 417 350*	C. M. St. P. & P.  N. Y. C.  Recent, Examples of.  4.8-4  A. C. L.  C. M. St. P. & P.  M. St. P. & S. S. M.  Southern Pacific (streamline)  Union Pac.  4.6-6-4, D. & R. G. W.  Diesel-electric  900-hp., C. R. I. & P. leases.  900-hp., Youngstown & Northern.  1,800-hp. S. A. L. Orange Blossom  Special  Modern  United States and Canada (Table)  Foreign:  Evolution of the locomotive (André  Chapelon)  Turbo-electric 2,500-hp., Union Pac.  London, Midland & Scottish, Coronation Scot  to tour America  Loss and damage and the car man, by Joe  Marshall  Louisville & Nashville, Thomas multiple  punch at So. Louisville.  Lubrication  Oil, Force-feed (L. V.)  Railroad equipment, by L. Grisbaum.  Report (Car Dept. Officers Assn.)  Lubricators: Oil dividers for use on loco-  motives (L. V.)  "Lumber Night" N. Y. Railroad Club.  M  Machine tool  installations at Danville, (C. & E. I.)  installations in the small shop  obsolescence  Machine tools  Bulldozer, Ajax, at Chicago, (C. & N.  W.)  Grinders, Fan-cooled motors on, Ham-	444* 165* 337 463* 123* 457 245* 120 323* 161† 88* 399† 208* 223 473 118† 353 237* 12* 497 12* 497	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover.  Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors.  Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.) Oil lubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses. Operation, Locomotive, Smokeless. Oxweld Railroad Service Co., portable cutting machine  P  Pacific Ry. Club (see Clubs and Assns.) Painting equipment Sand blast gun, Flat-nozzle, Michiana Products Corp. Recent trends in (Car Dept. Officers' Assn.) Payroll distribution, The Pennsylvania A. A. R. high-speed passenger locomotive tests "Blue Ribbon" fleet Boiler failure Equipment purchases Pere Marquette, Flexible staybolt, application, by A. D. O'Neil (M. B. A.). Performance, Locomotive, Not properly supervised Periscope for observing condition of fire in	313* 453§ 385* 493* 71* 496  331* 276§ 454§ 158* 141§ 225‡ 190*  47 142§  457 372* 453§ 283† 406
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331* 282  483*  500 357† 316† 79 357† 160† 399†  217 417 350* 355*	C. M. St. P. & P.  N. Y. C.  Recent, Examples of.  4-8-4  A. C. L.  C. M. St. P. & P.  M. St. P. & S. S. M	444* 165* 337 463* 123* 457 245* 120 323* 161† 88* 399† 208* 223 473 118† 353 237* 12* 27 419 12* 497	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover.  Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors.  Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.) Oil lubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses. Operation, Locomotive, Smokeless Oxweld Railroad Service Co., portable cutting machine  P  Pacific Ry. Club (see Clubs and Assns.) Painting equipment Sand blast gun, Flat-nozzle, Michiana Products Corp. Recent trends in (Car Dept. Officers' Assn.)  Payroll distribution, The Pennsylvania A. A. R. high-speed passenger locomotive tests "Blue Ribbon" fleet Boiler failure Equipment purchases Pere Marquette, Flexible staybolt, application, by A. D. O'Neil (M. B. A.) Performance, Locomotive, Not properly supervised Periscope for observing condition of fire in firebox corners (N. Y. C.)	313* 453§ 385* 493* 71* 496  331* 276§ 454§ 158* 267 435 141§ 225‡ 190*  457 372* 453§ 453§ 406 341§
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331* 282  483*  500 357† 316† 79 357† 160† 399†  217 417 350* 355*	C. M. St. P. & P.  N. Y. C.  Recent, Examples of.  4.8-4  A. C. L.  C. M. St. P. & P.  M. St. P. & S. M	444* 165* 337 463* 123* 457 245* 120 323* 161† 88* 399† 208* 223 473 118† 353 237* 12* 497 12* 497	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover.  Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors.  Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.) Oil lubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses. Oxweld Railroad Service Co., portable cutting machine  P  Pacific Ry. Club (see Clubs and Assns.) Painting equipment Sand blast gun, Flat-nozzle, Michiana Products Corp. Recent trends in (Car Dept. Officers' Assn.). Payroll distribution, The Pennsylvania A. A. R. high-speed passenger locomotive tests "Blue Ribbon" fleet Boiler failure Equipment purchases Pere Marquette, Flexible staybolt, application, by A. D. O'Neil (M. B. A.) Performance, Locomotive, Not properly supervised Pertscope, Use of, on Victorian Rys. Petroleum gases. Liquid, Rules for using	313* 453§ 385* 493* 496  331* 276§ 454§ 158*  267 435  141§ 225‡ 190*  457 372* 453§ 283† 406 341§ 432*
Independent Pneumatic Tool Co., Portable right-angle drill  Inspection  Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331* 282  483*  500 357† 316† 79 357† 160† 399†  217 417 350* 355*	C. M. St. P. & P.  N. Y. C.  Recent, Examples of.  4-8-4  A. C. L.  C. M. St. P. & P.  M. St. P. & S. S. M	444* 165* 337 463* 123* 457 245* 1208* 223 473 118† 319† 353 237* 12* 27 419 12* 497  226* 98§ 99§ 236* 77	New York Railroad Club (see Clubs and Assns.) Northern Pacific Angle-cock cap remover. Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors. Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.) Oil lubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses. Operation, Locomotive, Smokeless. Oxweld Railroad Service Co., portable cutting machine  P  Pacific Ry. Club (see Clubs and Assns.) Painting equipment Sand blast gun, Flat-nozzle, Michiana Products Corp. Recent trends in (Car Dept. Officers' Assn.) Payroll distribution, The Pennsylvania A. A. R. high-speed passenger locomotive tests "Blue Ribbon" fleet Boiler failure Equipment purchases Pere Marquette, Flexible staybolt, application, by A. D. O'Neil (M. B. A.) Performance, Locomotive, Not properly supervised Periscope for observing condition of fire in firebox corners (N. Y. C.). Periscope, Use of, on Victorian Rys. Pipe and bolt machine converted from	313* 453§ 385* 493* 71* 496  331* 276§ 454§ 158* 267 435 141§ 225‡ 190*  457 372* 453§ 453§ 453§ 4543§ 457 372* 453§ 457 457 457 457 457 457 457 457 457 457
Independent Pneumatic Tool Co., Portable right-angle drill Inspection  Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331* 282  483*  500 357† 316† 79 357† 160† 399†  217 417 350* 355*  308 129	C. M. St. P. & P.  N. Y. C.  Recent, Examples of.  4-8-4  A. C. L.  C. M. St. P. & P.  M. St. P. & S. S. M	444* 165* 337 463* 123* 457 245* 120 323* 161† 88* 399† 208* 223 473 118† 353 237* 12* 27 419 12* 497	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover.  Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors.  Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.) Oil lubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses. Oxweld Railroad Service Co., portable cutting machine  P  Pacific Ry. Club (see Clubs and Assns.) Painting equipment Sand blast gun, Flat-nozzle, Michiana Products Corp. Recent trends in (Car Dept. Officers' Assn.). Payroll distribution, The Pennsylvania A. A. R. high-speed passenger locomotive tests "Blue Ribbon" fleet Boiler failure Equipment purchases Pere Marquette, Flexible staybolt, application, by A. D. O'Neil (M. B. A.) Performance, Locomotive, Not properly supervised Periscope for observing condition of fire in firebox corners (N. Y. C.) Periscope, Use of, on Victorian Rys. Petroleum gases, Liquid, Rules for using (Mech. Div.) Pipe vise, Air-operated (C. M. St. P. & P.) Pipe vise, Air-operated (C. M. St. P. & P.)	313* 453§ 385* 493* 71* 496  331* 276§ 4545 1158* 267 435 141§ 225‡ 190*  457 372* 453§ 406 341§ 432* 638 432* 638 303* 310**
Independent Pneumatic Tool Co., Portable right-angle drill Inspection  Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331* 282  483*  500 357† 316† 79 357† 160† 399†  217 417 350* 355*  308 129	C. M. St. P. & P.  N. Y. C.  Recent, Examples of.  4-8-4  A. C. L.  C. M. St. P. & P.  M. St. P. & S. S. M 361*, Southern Pacific (streamline) Union Pac 43*, 4-6-6-4, D. & R. G. W.  Diesel-electric 900-hp., C. R. I. & P. leases 900-hp., Youngstown & Northern 1,800-hp. S. A. L. Orange Blossom Special Modern United States and Canada (Table) Foreign: Evolution of the locomotive (André Chapelon) Turbo-electric 2,500-hp., Union Pac London, Midland & Scottish, Coronation Scot to tour America Loss and damage and the car man, by Joe Marshall Louisville & Nashville, Thomas multiple punch at So. Louisville. Lubrication Oil, Force-feed (L. V.) Railroad equipment, by L. Grisbaum Report (Car Dept. Officers Assn.) Lubricators: Oil dividers for use on loco- motives (L. V.)  "Lumber Night" N. Y. Railroad Club  M  Machine tool installations at Danville, (C. & E. I.) installations in the small shop obsolescence Machine tools Buldozer, Ajax, at Chicago, (C. & N. W.) Grinders, Fan-cooled motors on, Ham- mond Machinery Builders, Inc Lathes, Tool-room, with relieving attach- ment, R. K. LeBlond Machine Tool Co. Punch, Multiple, at So. Louisville (L. & N.)  Machining operations: Correct cutting fluid. Machinings operations: Correct cutting fluid. Machininsts, Internal Assn. of, fifteth anni- versary	444* 165* 337 463* 123* 457 245* 1208* 223 473 118† 319† 353 237* 12* 27 419 12* 497  226* 98§ 99§ 236* 77 109* 237* 64§ 282†	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover.  Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors.  Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.) Oil lubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses. Oxweld Railroad Service Co., portable cutting machine  P  Pacific Ry. Club (see Clubs and Assns.) Painting equipment Sand blast gun, Flat-nozzle, Michiana Products Corp. Recent trends in (Car Dept. Officers' Assn.). Payroll distribution, The Pennsylvania A. A. R. high-speed passenger locomotive tests "Blue Ribbon" fleet Boiler failure Equipment purchases Pere Marquette, Flexible staybolt, application, by A. D. O'Neil (M. B. A.). Performance, Locomotive, Not properly supervised Periscope for observing condition of fire in firebox corners (N. Y. C.). Periscope, Use of, on Victorian Rys. Petroleum gases, Liquid, Rules for using (Mech. Div.) Pipe vise, Air-operated (C. M. St. P. & P.). Piston rods (see Rods, Piston)	313* 453§ 385* 493* 71* 496  331* 276§ 4545 1158* 267 435 141§ 225‡ 190*  457 372* 453§ 406 341§ 432* 638 432* 638 303* 310**
Independent Pneumatic Tool Co., Portable right-angle drill Inspection  Bureau of locomotive, report	151* 54* 301§ 311* 344* 141§ 331* 282  483*  500 357† 316† 79 357† 160† 399†  217 417 350* 355*  308 129	C. M. St. P. & P.  N. Y. C.  Recent, Examples of.  4-8-4  A. C. L.  C. M. St. P. & P.  M. St. P. & S. S. M 361*, Southern Pacific (streamline) Union Pac.  Union Pac.  900-hp., C. R. I. & P. leases. 900-hp., Youngstown & Northern. 1,800-hp., C. R. I. & P. leases. 900-hp., Youngstown & Northern. 1,800-hp., A. L. Orange Blossom Special  Modern United States and Canada (Table) Foreign: Evolution of the locomotive (André Chapelon)  Turbo-electric 2,500-hp., Union Pac. London, Midland & Scottish, Coronation Scot to tour America Loss and damage and the car man, by Joe Marshall Louisville & Nashville, Thomas multiple punch at So. Louisville. Lubrication Oil, Force-feed (L. V.) Railroad equipment, by L. Grisbaum. Report (Car Dept. Officers Assn.) Lubricators: Oil dividers for use on loco- motives (L. V.)  "Lumber Night" N. Y. Railroad Club.  M  Machine tool installations at Danville, (C. & E. I.) installations in the small shop obsolescence Machine tools Bulldozer, Ajax, at Chicago, (C. & N. W.) Grinders, Fan-cooled motors on, Ham- mond Machinery Builders, Inc. Lathes, Tool-room, with relieving attach- ment, R. K. LeBlond Machine Tool Co. Punch, Multiple, at So. Louisville (L. & N.)  Machinists, Internal Assn. of, fiftieth anni-	444* 165* 337 463* 123* 457 245* 1208* 223 473 118† 319† 353 237* 12* 27 419 12* 497  226* 98§ 99§ 236* 77 109* 237* 64§ 282†	New York Railroad Club (see Clubs and Assns.)  Northern Pacific Angle-cock cap remover.  Boiler failure Cleaning machine, Air-reservoir. Cylinder-welding car Jig for laying tight car floors.  Nystrom, K. F., honored by St. Louis Car Men  O  O'Brien, R. A., Cracking of boiler steel. Oddities in railroad operation. Ohio State University welding course. Oil burners, Low-pressure, Mahr Mfg. Co Oil, Car, Reclaimed, Specifications for (Mech. Div.). Oil-firing practice (F. & T. E. A.) Oil lubrication (see Lubrication) O'Neill, W. J., Inadequate enginehouses. Oxweld Railroad Service Co., portable cutting machine  P  Pacific Ry. Club (see Clubs and Assns.) Painting equipment Sand blast gun, Flat-nozzle, Michiana Products Corp. Recent trends in (Car Dept. Officers' Assn.). Payroll distribution, The Pennsylvania A. A. R. high-speed passenger locomotive tests "Blue Ribbon" fleet Boiler failure Equipment purchases Pere Marquette, Flexible staybolt, application, by A. D. O'Neil (M. B. A.). Performance, Locomotive, Not properly supervised Periscope for observing condition of fire in firebox corners (N. Y. C.). Periscope, Use of, on Victorian Rys. Petroleum gases, Liquid, Rules for using (Mech. Div.) Pipe vise, Air-operated (C. M. St. P. & P.). Piston rods (see Rods, Piston)	313* 453§ 385* 493* 71* 496  331* 276§ 4545 1158* 267 435 141§ 225‡ 190*  457 372* 453§ 406 341§ 432* 638 432* 638 303* 310**

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13\* 53§ 85\* 93\* 71\*

67 35 41§ 25‡ 90\*

29\* 17 42§

57 72\* 53§ 83†

06 41§ 32\* 63§ 866 03\* 10\* 91\*

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